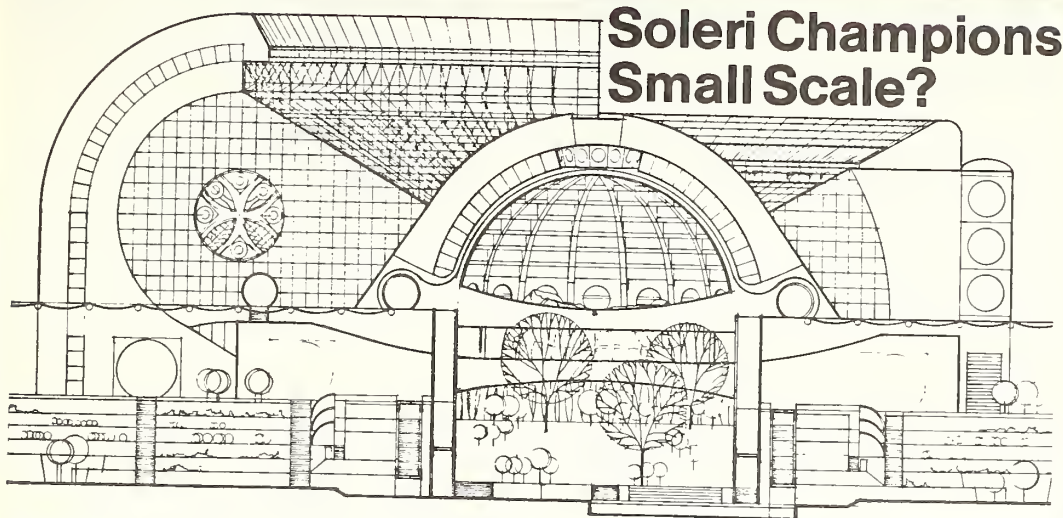




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FEDERAL

DESIGN MATTERS



Soleri Champions Small Scale?

Paolo Soleri is best known as the architect of "arcologies," a concept of architecture synthesizing ecology; but Soleri believes that before we can determine how our buildings and communities ought to be designed we must consider how we can live more meaningful lives and how we can direct technological resources for our own benefit. FDM asked author Jeffrey Cook to interview Soleri.

COOK: One of the issues raised in twentieth century architectural design touches on the question of when to use technology.

SOLERI: I think we are misdirecting our attention towards technological solutions when we should be concentrating on the way we live, and on the business of taming technology.

COOK: Your work seems to organize on a very grand scale, yet you construct your buildings using hand methods; why?

SOLERI: Man usually acts on nature in a grand scale. I'm trying to reorganize the flat, sprawling grand scale of cities into a smaller, more compact grand scale. That's why I reject the idea of megastructures.

Megastructures are totally irrelevant to my work; I'm dealing with ministructures.

It is true that I'm not willing to work on a single home. The individual homeowner will construct his own habitat within my larger plan. I am not concerned with those details.

We cannot continue just providing people with shelter and nothing else; we have to shelter social systems. If you structure the shelter for society, then individuals will find their place. We have to design culturally rich cities not just bedroom suburbs. Land and manufacturing are essential because we must be self supporting; we cannot be parasitic; every

"Every community needs the arts and performances; otherwise they're just survival machines."

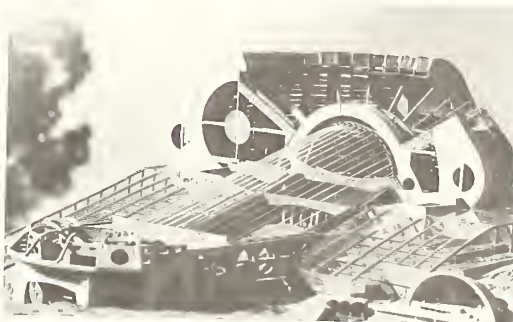
community needs the arts and performances; otherwise they're just survival machines.

COOK: Would you like to comment on the design of the shelters provided by the nation's largest landlord, the Federal government?

SOLERI: A gigantic bureaucracy suggests a grinding machine, and that is destructive to people. Perhaps the computer will free us from passing papers all day and will thus rid us of big bureaucracies. As long as we have a bureaucratic labor force based on paperwork, certain building types result; and the psychological effects depend upon the physical setup.

COOK: So those big machines, multi-story office buildings, are currently unavoidable; but the computer may eventually destroy them?

SOLERI: I find it disheartening that architects are forced to spend so much time designing temples where thousands of people shuffle papers all day. The situation can only try to cover up a grim. We can only solve the architectural program when we have changed the individual's lifestyle. Paper shuffling may not be the worst that can happen to people, but it does not begin to be the best.



Drawing at top: In response to Arizona's desert climate Soleri designs "garment" architecture: the exterior fabric changes seasonally. In winter the enclosures are transparent to the sun; in summer they are opaque; they are removed spring and fall. Photograph above: Proposed Valletta Spring at Arcosanti, showing a terraced solar greenhouse, with movable sunshades, that will supply both heat and food for a variety of other activities.

Photo by Ivan Pintar

Even in our own very small organization I begin to see too much paper shuffling. Feeding the Xerox machine is non-productive work.

COOK: Maybe that is why national productivity is down. Do you think the Federal government has a responsibility to try to solve these problems?

SOLERI: I would advocate an intense effort to build laboratory communities in which we could test ideas. Investigation means more than doing reports that few, if anyone, will read. We have to test by building; only then can we evaluate an experimental system's response.

COOK: So the Federal government should set aside money for experimenting, not only with building design but also with the kinds of work we do, construction methods, allocation of resources and lifestyles?

SOLERI: Exactly. Urban planners always assume their solutions are going to work. They try to reproduce the last successful or semi-successful solution and do so with conviction. But experimental work should start with fresh premises, recognizing that they might fail in some respects and succeed in others.

CONTINUED ON BACK PAGE

Issue 23, Concept:

When we formulated this issue we hoped to address questions of size and scale, the virtues of planning and building big vs. little. Are we currently building to the limits allowed in any sense other than size we wondered. Shouldn't we be seeking multiple ways to put technology to work to our advantage? Are we spending sufficient time and energy researching means of harnessing technological advances so that we benefit from them on a daily basis?

The answers given in this issue vary, but those interviewed agree that until we change our expectations of what constitutes the good life we can't possibly alter planning and building practices, nor master technology to serve our goals.

FEDERAL DESIGN MATTERS presents an exchange of information and ideas related to Federal design.

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In order to reach a wider audience with design news and ideas, we are sending this complimentary issue to people involved in design and arts activities who have not been regular recipients of **FEDERAL DESIGN MATTERS**. We hope you find this newsletter stimulating and useful. Future issues may be obtained from The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Correction: FDM regrets that the name of the Canadian firm responsible for developing a taxi which can hold five passengers or one wheel chair occupant and three other passengers was misspelled in Issue #22. The correct name of the firm is: Guillon, Smith, Marquart and Associates, Ltd.

Credit Extended

Steve Rosenthal of Auburndale, Mass. was responsible for the superb photographs of Quincy Market and Harborplace which appeared in FDM Issue #22.

Mississippi Center Tackles Small Town Problems

The Center for Small Town Research and Design was spurred initially by an NEA grant which provided the funds to study and eventually publish documentation pertaining to three Mississippi towns. A second grant enabled members of the Center to begin actually consulting with small towns to help improve their environment; consultation was done on a circuit rider basis. Janet Marie Smith describes the Center's activities.

After the establishment of the School of Architecture at Mississippi State University in 1974, the faculty soon noticed that its setting in Starkville presented a series of challenges which had not yet been formally addressed. Starkville was surrounded by small towns; big city solutions could not simply be reduced and applied to these communities on a smaller scale.

Under the direction of James F. Barker, associate dean of the School of Architecture, a Center for Small Town Research and Design was established, dedicated to implementing research in the field of small town design.

The faculty began methodically re-evaluating urban design theories. They hoped to adapt design tools, such as Halprin's "scoring," to the framework of small towns. These studies culminated in an NEA funded publication, *Small Town as an Art Object* (Wittenborn, 1975). Although the Center began by focusing on research, incoming calls from public officials and concerned citizens lured the Center faculty towards opportunities for actual design and planning in nearby small towns.

The Center quickly realized that patience was required in dealing with these communities. Barker summarized: "One of the strengths of small towns is their stability and slow response to change. The easier way of life they offer their citizens is considered an asset. There is a tendency for such communities to clash with the need to respond to change. This mind-set, along with the lack of resources in a small town, has been a source of frustration."

A Centers-sponsored symposium on small town research revealed that the architecture and planning disciplines were the furthest behind in this type of research. "Then we recognized," said Barker, "that the work we were conducting was unique. It meant there were opportunities to break new ground."

During the conference student teams



Above: Courthouse in Aberdeen, Mississippi. The Center for Small Town Research analyzed how Aberdeen had grown, helped the townspeople acknowledge their current image, and suggested how to improve it.
 Below: Courthouse in Holly Springs, Mississippi. The Center advised how to landscape and sign the square fronting the courthouse.

went into various small towns to conduct on-site projects, thereby testing their theories. Students presented the town of West Point, population 8,800, with recommendations for specific design solutions to existing problematic conditions. Although initially the town had been skeptical of this project, their attitude changed when the citizens saw the quality of the final results. Rufus A. Ward, Jr., an attorney and leader

"One of the strengths of small towns is their stability and slow response to change."

in the effort to revitalize West Point's downtown, believes that the students' work served as a catalyst: it showed citizens that simple improvements could enhance their environment. For example, in West Point people will not use the city-owned parking lot just behind the stores facing Main Street since a murder was committed there ten years ago. Instead, residents drive from store to store, within a short distance.

The students' suggestions spurred the townspeople to realize that a farmers' market could be established

on the parking lot; this should stimulate activity in the area and cause the lot to be regularly used again.

West Point faced a problem which has plagued revitalization efforts in other small communities: the highway "strip" vs. the downtown shopping district. As truck traffic increased, a by-pass was constructed on the town's perimeter to prevent noise and congestion from depreciating the town's peaceful quality. However, once the trucks moved outside town, commerce followed and so did shoppers. Ironically a conscious decision to improve the atmosphere of the town became damaging.

West Point is now trying to remedy the situation: attractive signs will be strategically placed on the strip to lure shoppers back downtown, one quarter mile away.

Mayor Thomas Glascoe of Ackerman, Mississippi, population 1,500, contacted the Center regarding a project sponsored by the Tennessee Valley Authority. "There isn't a great deal of staff for these projects within a community such as ours," commented the Mayor. "Work is done by volunteers, but they need to have direction. The Center gave us a focus, a purpose and an understanding of what we should be trying to do. The Center has given our town a puzzle. It is up to us to put the pieces together."



Energy Efficient Buildings: Whose Responsibility?

Richard Stein is a practicing architect whose career spans a 40-year period. After graduating from Harvard, where he studied with and worked for Walter Gropius and Marcel Breuer, Stein moved to New York City in 1941. His forward-looking research into energy-efficient design culminated in 1978 with the publication of *Architecture and Energy*, a thoughtful volume that addresses the need for architects to alter conventional means of achieving design solutions in order to cope with our limited energy resources. As Professor of Architecture at Cooper Union, Stein has disseminated his ideas to several generations of students, stimulating a body of architects capable of producing more humane, less arrogant designs for the energy-scarce years ahead.

SACHNER: As the debate over architectural scale has intensified during the last ten years, particularly in the centers of major American cities where huge office and residential towers have been erected on mid-block sites or in areas that previously had been characterized by low-rise structures, the discussion often has centered on the buildings' outward appearance or on their impact at the street level, i.e., the potential overloading of such services as transportation systems and other urban amenities. There has been less talk, it seems, on the energy efficiency of the new behemoths. In general, how do the new "big buildings" compare with more modest structures of the past in terms of energy performance?

STEIN: I think you can find inefficiency in buildings both big and small, but there is something inherently non-energy efficient about the way large buildings are designed: the underlying program criteria that make a structure large, in most cases are quite different than those that would be used if energy were a major consideration. Very large buildings stem from the decision to build for the greatest possible return on an available piece of land. Every step along the way is more or less derived from the fact that the decision-makers are real estate developers who think mainly in terms of immediate profit or loss. The design of buildings became somewhat standardized in the post-World War II period when it was determined that the fastest way to do a lot of building was to have as few specific design decisions as possible. The facade, for example, was considered as an undifferentiated skin that could be stretched over a building, and a single decision about how to design one component of this wrap-around assembly could be the extent of the design requirement. The dependence on internal mechanical systems for producing comfort conditions made that an available choice at the time. It also meant that starting around 1950 there has been a significant and steady growth in the energy requirement of buildings. That growing demand lasted until the early 1970's. At that point energy costs became so prohibitive that basic systems were throttled somewhat. However, all that's being done now with the large building is to take out some of the 'grossness' from the way mechanical systems operate. There has been no rethinking about whether those systems and those design decisions were the right ones in the first place.

SACHNER: How do these newer structures differ from buildings erected before the war?

STEIN: Architects during the '20's, '30's, and '40's were very much concerned with the performance of the skin of the building as a mediator between the outside and the inside, and there were some very thoughtful solutions proposed at that time. For example, I was recently looking at some wall sections of structures built in Zurich during the 1930's by Breuer and the Roth brothers. The walls were designed to provide sun shading and the introduction of air where required. The buildings themselves were very elegant and wonderfully differentiated: the attention focused on the building's facade derived



Right-The World Trade Center towers, New York City, are typical examples of the many completely sealed buildings requiring constant use of mechanical climate control systems.

(Photo courtesy The Port Authority of NY & NJ)

Left-The RCA building is described by Carol Herselle Krinsky in *Rockefeller Center* (Oxford University Press, 1975), as having been designed with "office floors which left no more than 27 1/2 feet between windows and interior corridor and service areas. This was the maximum distance that would give an acceptable amount of daylight and natural ventilation to office space. This provided benefits to office workers, and it meant that the planners would not have to air-condition the interior spaces to make them habitable." (Photo courtesy Rockefeller Center, Inc.)

particularly from the fact that the building was designed to respond to different solar conditions, wind directions, and interior comfort needs.

SACHNER: You recently served on the awards jury for the annual Progressive Architecture design competition. Did any of this year's entries attempt to employ pre-war techniques in order to conserve energy?

STEIN: Yes, most entries had in their designs some very obvious responses to the energy performance of the buildings. There were differences between north and south facades, there was consideration for shading and for natural air movement patterns. In many of the smaller buildings light was introduced into the center through shafts from above, something you would not have found at all five years ago. Quite serious and intelligent efforts are being made to reduce buildings' energy dependence.

SACHNER: Recently, the sealed building has come under attack for its total reliance on mechanical energy systems. Is this criticism valid?

STEIN: The fact that a building is sealed does contribute to energy problems. We did a study of energy usage in 1,000 Schools for the New York City Board of Education in 1975 just after fuel shortages became fairly widespread. The study revealed that the school with the highest, most chaotic use of energy was a windowless structure in Harlem that is completely sealed and mechanically controlled. In general, it is possible to operate a building with much less energy when you can depend to a great extent on natural systems, and, if you can consider a mechanical system as something that

intervenes only when nature is no longer adequate, then you have much greater energy efficiency. It's almost like certain English bicycles which have little booster motors that you throw on only when you get to a steep

hill. Of course, a gallon of fuel under those circumstances could last two years.

SACHNER: Can solar power play any significant role in the design of major office or residential structures?

STEIN: Yes, I think it can become an enormous factor. First, if you look at large office buildings, the major energy use is for lighting. If you consider natural light as a component of solar power and if you design a building to take advantage of it, you can probably save as much energy as you need to heat the structure. Second, the impact of solar energy on the vertical face of the building can be tremendous. This is an energy source that you can use when you need it and reject by means of external shading devices when you don't. Think of someone like Le Corbusier not just as an aesthetician and form-giver, but as someone who used the term *brise-soleil* very knowingly as something you must have on the north side of a building in Brazil, and the south side of the building in France. Sun shades are also applicable to high-rise buildings, as you can see in Niemeyer's Ministry of Education in Rio de Janeiro.

When I was a kid growing up in New York City, if you lived in an apartment house that had south-facing windows, the truck would come around in April to install awnings which would completely change the light and quality of the interior space. There was a wonderful coolness that went along with it. Then in the fall the trucks would take them away. This sort of thing is still found in Copenhagen and other places in Europe where there is some recognition that one can respond to the sun. In Sardinia there is a high-rise office tower where the whole facade is covered with *rolladen*, a roll-up solar thermal shutter that is also found in northern Europe. These mechanisms provide an informational aspect to the architecture: with people controlling the devices from inside, you can see the building opening and closing like the lens of a camera. I think that such basic energy solutions as these will be an important component that will go into the design of buildings in the 1980's and beyond.

Calthorpe: Ignoring Sprawl May Destroy Us All

In February *FDM* editor Leslie M. Freudenheim and Bay Area architect Norman Schlessinger met with Peter Calthorpe of Van der Ryn, Calthorpe and Partners, to discuss Marin Solar Village. It became clear that the firm's goals—building communities which are environmentally, ecologically and economically sound—could have wide application and deserve our attention.

FREUDENHEIM: In the future should we be building to the limits that technology allows? If so, does that mean bigger and bulkier buildings or are there other ways to think of that?

CALTHORPE: Well, the issue of scale is a central philosophical issue for architecture, as well as for institutions and planning, and my reaction to the question "Is big better or is small beautiful?" is ambivalent because it is always open to misinterpretation. We're operating on a very big scale by proposing a new town in Marin County because it's not the normal developer's scale. In the Sun Belt the strategy for accommodating growth applauds haphazard sprawl—bedroom communities of single-family houses, spread out, connected by freeways to the urban core. To a certain degree, you could say that people are thinking small: a developer goes out and builds 20 units, or 50 units. Even though huge corporations and large banks are very much in control, and it is popular to say that everything is happening on a large scale, the developers' current thinking is very small. Furthermore, I don't think that's a good thing—it's piecemeal and it leads to an architectural world and an institutional world that really doesn't function in an ecological sense. Perhaps more importantly, it doesn't function in a human sense.

I avoid the issue of big versus small. I think the appropriate scale is the human scale. We don't apply a ruler to that. The human scale can be very large and monumental in certain cases; witness many of the great monuments in Europe: cathedrals, piazzas and squares. Piazza San Marco in Venice is a huge, monumental space and yet it has a real human scale and it works in a human sense. Size is not the issue.

FREUDENHEIM: What about height?

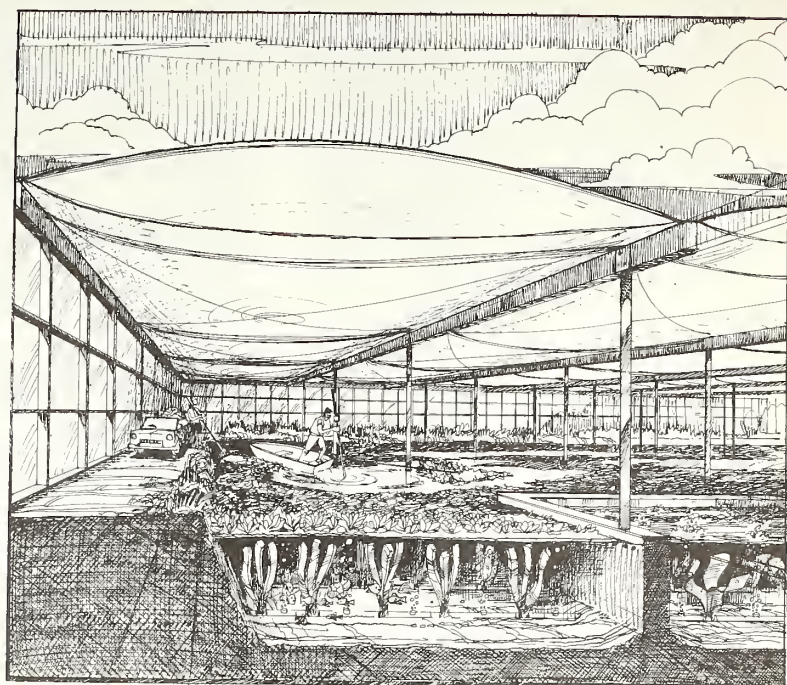
CALTHORPE: The real issue is scale, not height. Sometimes I think New York is a more human place than Los Angeles because there's street life, and people contact one another. There's a pedestrian existence which allows people to meet as opposed to being encapsulated in automobiles. Any one chunk of Los Angeles is low-rise and small-scale, yet it's less human-scale, in my estimation, than New York City.

SCHLESINGER: How does large scale vs small scale relate to the issue of technology, ecology and the future?

CALTHORPE: Many people scoff and say, "You can't plan the future," but I think it's incumbent upon an intelligent civilization to continue to try, because random marketplace forces are producing an unsustainable form of growth, i.e., suburban sprawl.

The San Joaquin Valley, possibly the most valuable agricultural land in the world, is being consumed by single family dwellings with useless side yards and front lawns. And, of course, when you look at that use of space, it's very inefficient from a social standpoint and from a private standpoint. Front yards and side yards aren't really used as common space—places where people interact with one another—because they're private property. Not only are they useless but they also consume large amounts of water and fertilizer, i.e., natural resources. Also single family dwellings require more energy for heat than town-houses with their party-walls. Therefore, single family housing developments typically use twice as many resources to produce an environment that tends to alienate people and consume too much land.

SCHLESINGER: What solutions do you propose?

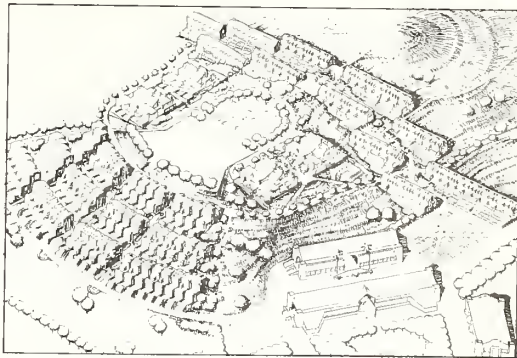


"People may scoff and say, 'You can't plan the future.' But random marketplace forces are producing an unsustainable form of growth, i.e., suburban sprawl."

CALTHORPE: Our plan for a solar village at Hamilton Air Force Base in Marin takes the best of the urban style we've known in the past and combines it with new appropriate technologies: solar, biological systems, food production, and water conservation. We plan attached townhouse dwellings with about 10 to 20 units per acre. New York City has 50 to 70 units per acre in its less dense areas. Taking our cue from Jane Jacobs, we are trying to learn from successful urban environments of the past: they were pedestrian and they were mixed use; therefore life spilled into the streets at all times during the day. Housing was not built, as it is today, far away from work, from shops and from industry. Our current separatist zoning tends to socially emasculate public spaces and remove all their animation; it also creates a transportation bottleneck: masses of people driving from one place to another, freeways clogged and gas wasted. The idea of mixed use, it seems to me, is not only socially desirable, as Jane Jacobs points out, it's ecologically needed.

FREUDENHEIM: In the proposed Marin Village, how do you address ecological issues?

CALTHORPE: Let's say you wanted to make solar access the primary criteria. You can then design sun-oriented houses in a density that would support a pedestrian environment. However, if



you want to have the workplace and retail shops close by—to recreate that world in which people don't have to hop in their car every time they want something—then you must increase the density to support both shops and public transit. Since we call for density anyway to preserve land, energy and resources, we have no reason to eliminate it when we're dealing with the economics of mixed use.

To arrive at workable, livable density takes conscious, comprehensive planning. Otherwise, people will end up having the kind of barriers to a pedestrian world that have existed in the past. They'll end up driving their car for one mile instead of three miles, which is the suburban phenomenon.

We're planning at a large scale but we're trying to create a human scale. With *laissez-faire* the human scale is lost.

SCHLESINGER: Wouldn't public transportation be essential for this kind of environment? In a city like New York, you can walk 40 blocks to

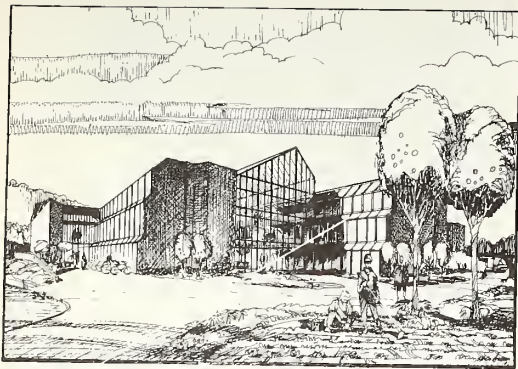
almost anything, but you can hop on a bus too.

CALTHORPE: We envision nodes of density, for example in the Sun Belt, with pedestrian coherence, surrounded by green space saved for agricultural purposes. However, each town would be dense enough to make a mass transit system linking them all viable.

The Hamilton plan calls for keeping the automobile at the periphery on a loop road. No one would be more than 300–400 feet from their car, which is a lot by today's standard of 150–200 feet. It is very efficient for a store to have a small delivery van that goes around and delivers purchases instead of everybody bringing their car.

SCHLESINGER: True, and when you call in an order you don't impulse buy; you can walk to the store because you don't have to carry your groceries home.

CALTHORPE: Furthermore, with a good delivery system you can run several errands on the same walk, which saves time and gasoline.



Site Plan (lower right): Plan for Marin County, California to reinvigorate Hamilton Air Force Base in a Solar Village designed by Van der Ryn, Calthorpe and Partners. Existing streambeds will be restored and a new pond created as a site for homes, recreation and an aquatic ecology. The corporate center top right is designed for energy efficiency including extensive use of daylighting and solar energy. Existing administrative buildings will be recycled into a village center. There will be on-site agriculture and industry. Solar energy will heat houses bottom left and provide 80% of the space and water heating conventionally supplied by natural gas or electricity. In the solar aquasystem top left wastewater is purified in closed greenhouses and re-used for agriculture while producing water hyacinths (which can be turned into fuel, feed or fertilizer) and shrimp (which can be sold to local restaurants).

FREUDENHEIM: Water and sewage are two other important things which are less addressed because they're not as glamorous, but they are significant issues. Water will become an even more significant issue as time passes. Do you see any answers?

CALTHORPE: The plan we have for Hamilton involves conserving these neglected resources. We hope to use a biological sewage treatment scheme like the one which is currently employed in the city of Hercules, California. This is the idea: waste products are really nutrients. Every other culture in the history of mankind has understood that waste is the base upon which the whole nutrient cycle functions.

FREUDENHEIM: Manure on your garden?

"Every other culture ... has understood that waste is the base upon which the whole nutrient cycle functions; and the human stuff fits into that category no matter how God-like we consider ourselves."

CALTHORPE: Right, and the human stuff fits into that category no matter how God-like we consider ourselves. In the solar aquasystem wastewater is purified in closed greenhouses and re-used for agriculture while producing water hyacinths which can be turned into fuel, feed or fertilizer and shrimp which can be sold to local restaurants. That's one example of how you can turn liabilities into resources.

SCHLESINGER: Why do you think the voters turned down your solar village proposal?

CALTHORPE: All the counties around the Bay Area have said, "we don't want more growth." Growth is seen as a liability, not an asset. We believe that with proper planning you can accommodate growth and therefore economic well-being without the environmental implications that you had before. Unfortunately we didn't have the time, money or campaign experience to convince enough people. However we did get a 47% yes vote.

FREUDENHEIM: Have any corporations now located in "Silicon Valley" near Palo Alto expressed interest in Marin?

CALTHORPE: Many corporations would like to locate where they could provide housing. There's a housing moratorium in "Silicon Valley" because sprawl is devouring limited resources.

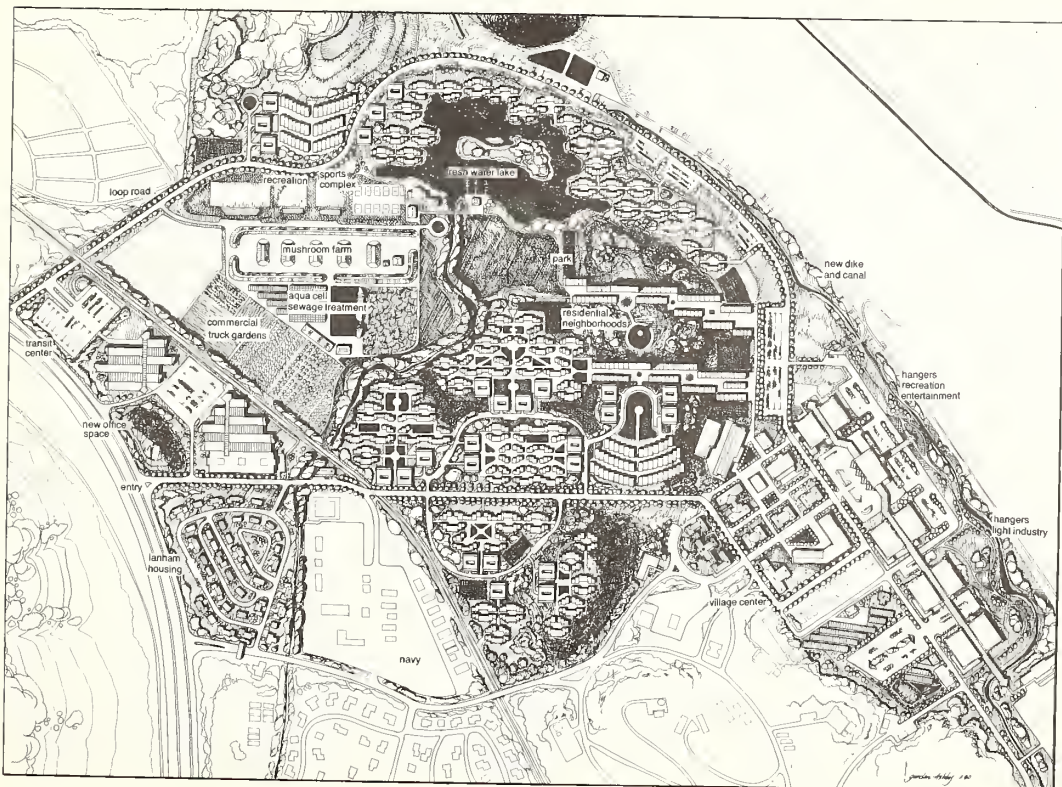
Corporations are already screaming, "Look, I can't build anymore, I can't expand anymore, not because I don't have the land to build a new factory but because I can't find housing for the people I want to employ."

SCHLESINGER: Years ago we had mill towns; will we move toward the company town again?

CALTHORPE: If you work for a corporation which provides your housing, and offers a company store with special prices, you may become dependent upon it and your autonomy may be eroded. It's a complicated issue. However, it's very successful and frightening in Japan—cradle to grave in one corporation. The corporations take care of people in the same way that a welfare state was once meant to.

FREUDENHEIM: Do you have developers clamoring at the door?

CALTHORPE: Some developers love it because they get higher density (more units). Usually county officials say, "We don't want your sewage hookup." With our plan the County doesn't have to worry about building more sewer facilities. And when we tell them we have employment on site—most counties will say, "great, we need employment." However, it's a new idea and no developer wants to take risks. They want to do what they know even though it's becoming very difficult. What they know is putting up tracts. Even though you can make a very clear, scientific case that this is a better way to do things you're always going to have resistance, or just inertia, of people not wanting to try new things.



Tomorrow's Parks: Large or Small?

Stanley Abercrombie

The urban parks of America's future: What can we reasonably expect, and what, indeed, should we hope for? Big parks or small ones? Exercise grounds or pleasure gardens? Works of art or preserved patches of wilderness?

One obvious person to ask is William H. ("Holly") Whyte, who, after spending years worrying and studying about the spread of suburban clutter into the countryside (his book *The Last Landscape* being one result), has recently turned his attention to open space within the city. His latest book, *The Social Life of Small Urban Spaces* (The Conservation Foundation, Washington, D.C., 1980) summarizes his findings.

He elaborated on those findings for us in his office in Rockefeller Center, a location with a number of New York's most exemplary open spaces close at hand. To be practical, he thought, it's difficult to foresee the creation of new large park areas in New York, and, with Central Park already there, there's really little need for such spaces. (He's opposed to Westway and its string of new parkland.) "The future," he said, "lies in small spaces," but, as his book documents, the carrying capacity for human enjoyment of small spaces is surprisingly large. In the early '70s, when Whyte began looking at the plazas resulting from new incentive zoning programs, there was widespread concern about overcrowding and widespread fear of urban density. Whyte's studies showed, contrary to expectation, that overcrowded urban spaces are difficult to find: the numbers of people sitting on benches in even the most popular locations, for example, seem to be self-regulating and usually at levels far below capacity. Nor is the opposite problem anything to worry about: there is not likely ever to be a surfeit of urban spaces or a saturation of the need for them, because those who use them are, for the most part, those who live or work locally, two-thirds from within a three-block radius. A new office tower generates its own need for a new plaza. So rather than a small number of large open spaces, Whyte would opt for the same land area divided into many small spaces. Something slightly larger than New York's "vest-pocket" Paley Park, he thinks, is the ideal size and he sees such parks as more valuable to a city than most plazas at the foot of office towers, most covered pedestrian areas, and most through-block arcades. If incentive bonuses are to be given, Whyte says, they should be for the creation of small urban parks even if not physically contiguous with a new

building. This concept should appeal to developers, who can trade land on a relatively inexpensive side street for increased building volume on a major avenue.

One not so small urban park area now being planned that Whyte considers exemplary is Pioneer Square in Portland. It is smack in the middle of town, fronting on an old courthouse once threatened with demolition, and the park itself is a replacement for a low parking structure. Losing a garage for a park is what Whyte considers enlightened behaviour.

We wondered if Elizabeth Barlow, Administrator of Central Park, would have the same attitude. New York had shown great foresight in the nineteenth century in setting aside 843 acres of real estate for a park. Could we expect, we asked Barlow, that booming cities in the "sun belt" (Phoenix, say) or cities about to boom (Galveston, perhaps) would have similar foresight? Should we even want them to?

"Large metropolitan parks are not obsolete," she said firmly, but, on the other hand, the particular phenomena of Central Park, of Brooklyn's Prospect Park, Boston's Fenway, or San Francisco's Golden Gate Park are not likely to be repeated, for their original purpose was one we would today find rather quaint. Olmsted called Central Park "rue en urbe." It was intentionally rustic and picturesque, and its main purpose was a genteel sort of scenic refreshment. "We no longer put a premium on scenic refreshment," Barlow said, "not consciously."

Still, other types of large parks, serving other purposes, can be hoped for—on the one hand, preserving nature in a wild, not necessarily picturesque, state; on the other, providing athletic opportunities. And, as Barlow added, concern for maintaining the character of the large parks we already have seems assured. "The present sentiment for trees in New York," she said, "is enough to prevent any further subtraction of green areas."

In addition, techniques of preservation are more sophisticated than before. As architectural preservation depends on carefully researched drawings (those of the Historic American Buildings Survey, for example), so park preservation has become similarly scientific, documenting original vegetation and subsequent changes, topography, climate, wild life, and other physical factors. But political organization for parks lags behind that for buildings: there is no equivalent for parks of the National Trust for Historic Preservation (although the Trust itself does take an interest in parks).



Top: Greenacre Park, 51st Street between 2nd & 3rd Avenues, N.Y.C., is one of the most heavily used of small urban parks, but rarely seems overcrowded. Bottom: Front steps of New York Public Library, 42nd Street and Fifth Avenue, N.Y.C. Steps provide seating and on sunny days people gather here. "Where pedestrian flows bisect a sitable place, that is where people will most likely sit," says William H. Whyte.

A third opinion about future parks came from Jeannette Bamford, Executive Director of the Parks Council, an independent New York organization whose current emphases include supporting volunteer park workers, organizing work-study programs for young people, and encouraging intelligent waterfront development. Bamford agreed that both big and small park areas are valid and valuable and that the character of park usage is changing, she pointed to New York's Gateway National Seashore as a large project synthesizing many of the new demands we make on our parks. It

incorporates such ecological preserves as the Jamaica Bay Wildlife Refuge, and it will also offer a wide variety of athletic facilities. Its development is being planned not only for the needs of the city, but also for the needs of the whole region, and that development, Bamford suggested, echoes the question so many enlightened people are asking now. "What should be the purpose of a park today?"

There are many different answers, and we shall surely see them made manifest in many different forms. Attitudes are changing about Federal responsibility for parks, about the character of parks, even about what constitutes a park.



Rudofsky: Architecture Follows Lifestyle

Although Bernard Rudofsky is best known as the man who opened our eyes to the virtues of vernacular architecture, in this interview he tells editor Leslie M. Freudenheim that we need to re-assess our life style first; thereafter architectural and technological priorities will emerge.

FREUDENHEIM: You have been typed as the man who made vernacular architecture respectable. How did you get interested in such an out-of-the-way subject in the first place?

RUDOFSKY: At the time I entered university the Modern Architecture Movement was in its infancy and, to my mind, not very promising. This may sound preposterous but I had good reasons for being disillusioned. Formerly, part of an old-fashioned education called for travel: the Grand Tour for the well-heeled, and the proper pilgrimages to the classical monuments for less privileged students, and through my travels along the Mediterranean, in the Balkans and Asia Minor, I came to know an architecture that I had not found in books. It was the vernacular in its myriad facets that at once seemed more attractive, more functional, more humane to me than the products of modern architecture's prophets. I have been a passionate admirer and student of what we call primitive builders ever since.

FREUDENHEIM: When, forty years ago, you proposed an exhibition of vernacular architecture to the directors of New York's Museum of Modern Art, what were their objections?

RUDOFSKY: That it had nothing to do with modern architecture whose propagation was one of the museum's major aims. I probably was then more polite than I am now and took great pains to argue my point. But I did not get anywhere with them. Twenty-three years later, when I did bring off "Architecture Without Architects," both the exhibition and the accompanying book were promptly revived by the architectural fraternity and called "subversive." Fortunately, things have changed; nowadays bookstores display beautifully illustrated books on every kind of minor architecture. Besides, the new generation of architects have had their fill of so-called modern architecture, and The American Institute of Architects recently conferred upon me a medal for my

"Some day—we might wake up to the realization that to walk is not altogether subhuman."

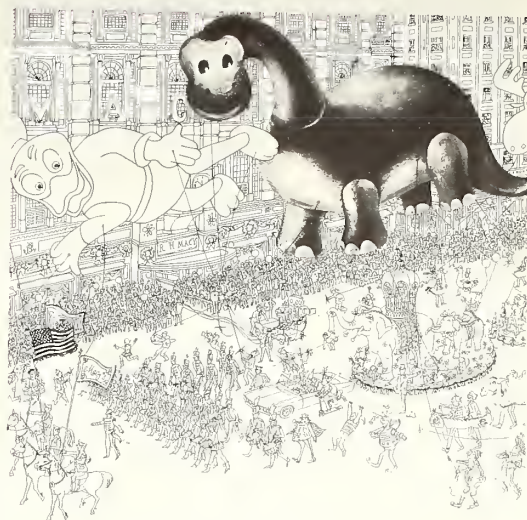
"subversive" writings. For the first time in the country's history we realize that we have mismanaged our traditional resources and must look for new ones. These turn out to be mankind's oldest—sun, wind and water—not to be exploited in some gigantic schemes but to be utilized on a small scale as windcoops and waterwheels, patios and walled gardens for capturing and storing warmth. This is where vernacular architecture comes in.

FREUDENHEIM: Does the essential difference between vernacular and our architecture lie in scale and size?

RUDOFSKY: Not necessarily. Spanish and Italian hilltowns—to mention more or less familiar examples—are nothing if not monumental. It just happens that megalomaniacs that we are, we think of architecture built to human scale as small. Not size but a built-in life style distinguishes vernacular architecture from our commercially conditioned one. In my current exhibition, "Now I Lay Me Down to Eat," at New York's Cooper-Hewitt Museum, I am showing aspects of vernacular architecture that have been overlooked or intentionally ignored and I am calling attention to the fact that many so-called primitive nations are far ahead of us in several respects.

FREUDENHEIM: What about our cities? Do you find it upsetting to see the large size and overpowering scale of buildings such as those now going up in New York City? Doesn't such gigantic construction deny light and sunshine to millions on the street and make it less enjoyable for workers caught inside who fight so-called technological progress—stopped elevators, broken air-conditioners, sealed windows?

RUDOFSKY: I don't think that people in the street actually miss the sun. If so, they are a minority. What I find more remarkable is that the inhabitants of townhouses and apartment buildings resign themselves to a sunless existence at



"Averse to strolling, Americans are fond of marching," from *Streets For People*, by Bernard Rudofsky.

home every time a new highrise goes up in front of them. It seems that our urbanites are a meek lot; they probably comfort themselves with the thought that their deprivations are unavoidable in this technological age.

FREUDENHEIM: Can't we call a halt? Isn't it time to say: sorry, you can't build any higher; you are destroying the livability of our city?

RUDOFSKY: You will have to put the question to the speculators and politicians, and to their handmaidens, the planners. As for myself, I think that the halt will come without the need to call for it. Each new highrise adds from 10,000 to 20,000 transient residents to the city—

"Not size but a built-in life style distinguishes vernacular architecture from our commercially conditioned one."

people who have to be fed and transported back and forth. New Yorkers just want to have their apple and eat it too. The suggestion that those who are fed up with the place leave for the Sun Belt is but a half measure. These malcontents, so unpopular in the East, and unwelcome in the West, might as well try to broaden their horizon and set out as latter-day pioneers and found a New America on a different planet.

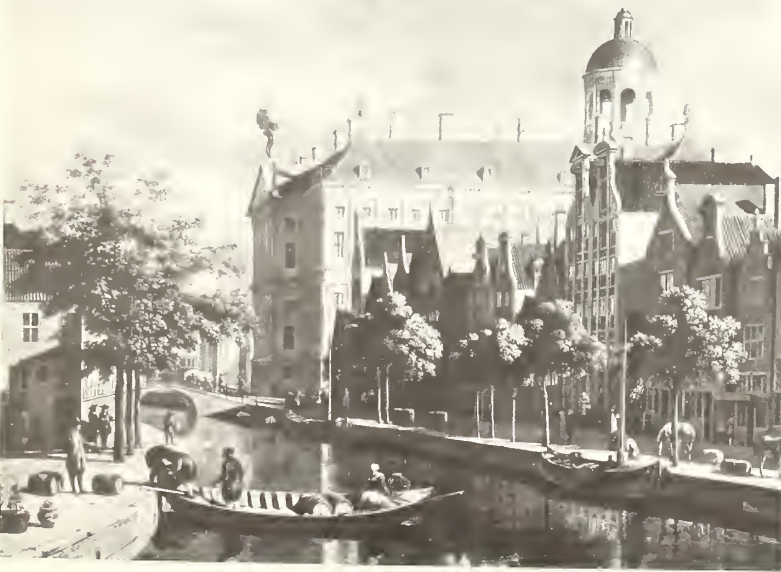
FREUDENHEIM: Do you think we can build small in the future and contain sprawl in the process? Are new small towns a solution?

RUDOFSKY: Opinions on the merit of new towns are divided. At any rate, in these towns great emphasis is put on the rights and safety of pedestrians. In some instances—in Holland and Germany—speed limits of ten miles have been imposed on vehicles, and some obstacle courses thrown in for good measure. Besides, abroad, bicycles are an important means of urban transportation. The Dutch and the Chinese have long shown us the way but then, their cyclists are self-disciplined. Some day in the not so distant future, when Manhattan's last city buses and subway trains have broken down for good and cars have made city streets impassable during the better part of the day, we might wake up to the realization that to walk is not altogether subhuman. Of course, an entire generation grown up with school buses might have to retrofit their extremities for walking.

FREUDENHEIM: Can you think of any way for the man in the street to become more informed and therefore more involved?

RUDOFSKY: This is a sore point. Information has to allow for criticism, which in itself is considered bad form in this country. What everybody likes to believe is that we are uniquely privileged, the world's greatest. As Aldous Huxley noted, people are happy; they get what they want, and never want what they can't get.

"The serenity of seventeenth century Amsterdam, caught in Gerrit Beckheysde's painting, Rijksmuseum, Amsterdam, proved to be nontransferable to its sister city on the Hudson," from *Streets For People* by Bernard Rudofsky.



Soleri

FROM PAGE ONE

Furthermore, there is an enormous surplus of wealth in this country that could be channeled into different aspects of this experimentation.

COOK: Has the energy situation changed your thinking in any fundamental way?

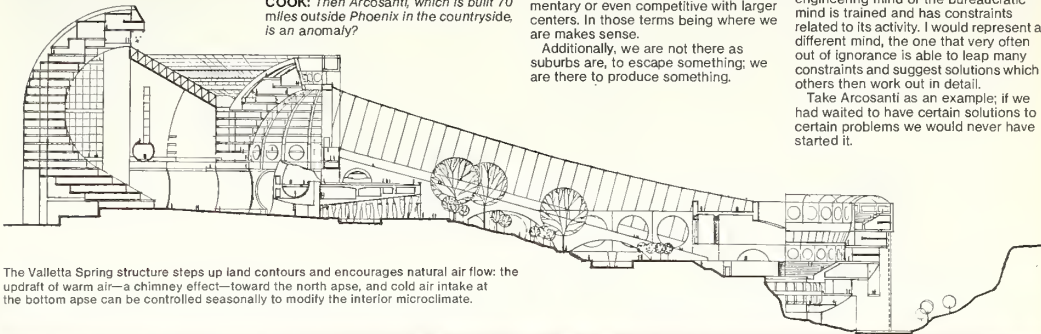
SOLERI: We don't have so much an energy crisis as a moral crisis, an ethical crisis. Everything that provides our

support systems and survival now seems to be in jeopardy. We don't know what we are all about, and worse, we don't seem to care.

COOK: If I understand correctly, you're leaning more toward a spiritual responsibility, not just an architectural responsibility?

SOLERI: Yes. In terms of long-term survival I do see the city as a device which can save us, and which is going to make us much more frugal. But it has to be transformed. The countryside is not going to give us the answer, but the urban model will.

COOK: Then Arcosanti, which is built 70 miles outside Phoenix in the countryside, is an anomaly?



The Valletta Spring structure steps up land contours and encourages natural air flow: the updraft of warm air—a chimney effect—toward the north apse, and cold air intake at the bottom apse can be controlled seasonally to modify the interior microclimate.

"Megastructures are totally irrelevant to my work; I'm dealing with ministructures."

SOLERI: Not necessarily. In Arizona, Tucson and Phoenix polarize the state's wealth. We need decentralization. I do not mean that we should cover the state with a suburban network; but we need centers with their own vitality, complementary or even competitive with larger centers. In those terms being where we are makes sense.

Additionally, we are not there as suburbs are, to escape something; we are there to produce something.

COOK: Where are you going to find designers or architects qualified to work with such experiments?

SOLERI: With the enormous extent of current knowledge and with new discoveries daily it is not possible for one person to know everything and be invested with all responsibility. But I believe we need someone who is a thinker in a leading position; others can work out the details.

COOK: If you were asked to be The Federal Architect, to exercise leadership, what would you do?

SOLERI: I am not sure, but I think that the engineering mind or the bureaucratic mind is trained and has constraints related to its activity. I would represent a different mind, the one that very often out of ignorance is able to leap many constraints and suggest solutions which others then work out in detail.

Take Arcosanti as an example; if we had waited to have certain solutions to certain problems we would never have started it.

Letters to the Editor



Jane Jacobs on Pruitt-Igoe

Thanks for sending me copies of the February issue of FDM. I am pleased with your excellent job of excerpting from my Boston talk, keeping the meaning while condensing it admirably. My only complaint (and it is a teensy one) is with the caption on the Pruitt-Igoe explosion picture. Actually there was great consideration for so-called appropriate, humanizing factors in the design. That is why it received so much attention and commendation when it was built. The point is this: there is NO WAY design can substitute for lack of human use and reflecting human needs, which is what I take humanizing to mean. What in the world would make the planners assume it would be simple to find the appropriate humanizing factors in a project of this scale, completeness and rigidity? Factors so-selected end up being cosmetic, as they were in this case. But neither Yamasaki nor the team of experts working with him realized how superficial and cosmetic their "humanizing" factors were.

Very best,
Jane Jacobs
Toronto, Canada

Transportation Design

Delighted to see Lori Zelenko's byline in FDM. A good sturdy piece, full of information.

Brendan Gill
New York City

Lori Zelenko's article on Transportation Priorities (FDM Issue #22) raises some interesting questions. However, she makes several incomplete explanations and quotes me out of context.

For instance, nowhere is it explained that the Federal Government has not aggressively stimulated local governments to pursue an active policy in the area of Aesthetics and Design

for Transportation; Federal officials usually maintain more of a "responsive" stance, an attitude which may also be in jeopardy due to funding and program cutbacks. This suggests several other problems.

Given that all agencies are "political" by the nature of our system, one may ponder their relationships with certain industries when it comes to handing out Research and Design moneys. To wonder whether the aluminum industry belongs in the taxi/paratransit business (which I do), is certainly not the same as claiming conspiracy (which I don't); yet it is not beyond speculation to foresee in this intended collaboration the specter of the Grumman bus and R46 subway car calamities here in New York. In each of those cases the problem was one of shortsighted thinking. There exists in this country a singular unwillingness to look beyond the short term because of anticipated changes in personnel and policies every few years. Government as a revolving-door regulator does not work. Although useful information is always gathered and available at the staff level of large organizations, it is frequently not communicated to top level decision makers: UMTA may not have been entirely aware of other concurrent developments when determining priorities and allocating taxi/paratransit funds. Although the Canadian GSM taxi has not yet been purchased by a local fleet owner, it is more than likely that some of its development testing will take place here in New York where the local industry has already publicly expressed interest in the vehicle. This same vehicle had already undergone five years of development before it was tested on the streets.

The Federal government, on the other hand, has acquired some notoriety for occasionally shortcircuiting this kind of rational approach to design. Grants are sometimes awarded without enough regard for construction and performance guarantees. This is the point Ms. Zelenko fails to catch when she declares DOT's commitment to good design seems difficult to maintain. This is also the reason why the unencumbered private sector tries to circumvent government policy.

Mark Greenwald
Urban Planner, New York City

Design Briefs

Joan Shantz

Participants in the Government Printing Office's 7th Annual DESIGN FOCUS program particularly enjoyed the slide presentations on the History of Graphic Arts and Typography, and were fascinated by their tour of GPO. For further information on Design Focus programs held each February contact Mr. Louis Glessman, Superintendent of Typography and Design, GPO, N. Capitol S.H. Street N.W., Washington, D.C. 20401.

Reminder: architects and landscape architects interested in positions with the Federal Government see Announcement No. 446; job application forms, now being accepted on a continuous basis, are available from any Federal job information center or from Office of Personnel Management, Staffing Services Division, Professional Examining Section, 1846 Sherman St., Denver, Co. 80203.

Congratulations to The Geological Survey's National Mapping Program for its manual which not only establishes strong, visual identity for its public programs but also assists those who write, design, edit or supervise typesetters or printers.

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